How do the ACS Five-Year Migration Data Compare to the 2000 Census Migration Data?

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Introduction

- This poster analyzes 5-year county-to-county migration data from the 2005-2009 ACS through flow and mover counts. These counts are compared to the 2000 Census data to show that the ACS 5-year data are valid estimates of county-to-county migration.

Why County-to-County?

- There are many requests for recent county-to-county migration data.
- This is the first county-to-county migration data since the release from the 2000 Census.

Data

- 2000 Census
  - —Migration question first asked in 1940.
  - —Conducted once a decade on years ending in "0."
  - —Universe: Population 5 years and over.
  - —Discontinuation of the long form after the 2000 Census.
- American Community Survey (ACS) 5-Year Estimates, 2005-2009
  - —Replaced the long form in collecting monthly detailed social, economic, and housing data that are released annually.
  - —2005-2009 are first estimates to be released for all county and county equivalents using ACS.
  - —Universe: Population age 1 and over.

Different Survey Question

- In the 2000 Census, respondents were asked where they lived 5 years ago. This would include people who moved 1, 2, 3, 4, and 5 years ago.
- In the 2005-2009 ACS 5-year estimates, respondents were asked where they lived 1 year ago.
- Despite the ACS being a 5-year aggregated dataset, these two questions are not interchangeable.

What are the largest origin and destination flows?

Flow Counts

Table 1. Top 10 Origin Flows, 2000 Census and 2005-2009 ACS

	2000 Census			2005-2009 ACS		
	County, State	Flow Count	Percent	County, State	Flow Count	Percent
1	Los Angeles County, California	2,372	0.29%	Maricopa County, Arizona	1,156	0.68%
2	Maricopa County, Arizona	2,260	0.28%	Los Angeles County, California	1,001	0.46%
3	San Diego County, California	2,244	0.28%	Cook County, Illinois	1,033	0.43%
4	Cook County, Illinois	2,228	0.28%	San Diego County, California	967	0.41%
5	Harris County, Texas	2,048	0.25%	Harris County, Texas	948	0.40%
6	Dallas County, Texas	1,884	0.23%	Clark County, Nevada	866	0.36%
7	Clark County, Nevada	1,836	0.23%	Dallas County, Texas	755	0.32%
8	San Bernardino County, California	1,775	0.22%	Hillsborough County, Florida	711	0.30%
9	Orange County, California	1,736	0.21%	Tarrant County, Texas	709	0.30%
10	Tarrant County, Texas	1,671	0.21%	Orange County, Florida	686	0.29%

Table 2. Top 10 Destination Flows, 2000 Census and 2005-2009 ACS

	2000 Census			2005-2009 ACS		
	County, State	Flow Count	Percent	County, State	Flow Count	Percent
1	Maricopa County, Arizona	2,012	0.25%	Maricopa County, Arizona	993	0.42%
2	San Diego County, California	1,814	0.23%	Harris County, Texas	806	0.34%
3	Los Angeles County, California	1,587	0.20%	San Diego County, California	795	0.33%
4	Harris County, Texas	1,581	0.20%	Los Angeles County, California	741	0.31%
5	Cook County, Illinois	1,496	0.19%	Cook County, Illinois	732	0.31%
6	Clark County, Nevada	1,482	0.18%	Bexar County, Texas	722	0.30%
7	Tarrant County, Texas	1,477	0.18%	Clark County, Nevada	698	0.29%
8	Dallas County, Texas	1,464	0.18%	Tarrant County, Texas	679	0.28%
9	El Paso County, Colorado	1,461	0.18%	Richland County, South Carolina	673	0.28%
10	Bexar County, Texas	1,383	0.17%	Dallas County, Texas	618	0.26%

Mover Counts

Table 3. Top 10 Origin Mover Counts, 2000 Census and 2005-2009 ACS

	2000 Census			2005-2009 ACS		
	County, State	Mover Count	Percent	County, State	Mover Count	Percent
1	Los Angeles County, California	1,184,219	2.51%	Los Angeles County, California	372,331	2.10%
2	Cook County, Illinois	749,553	1.59%	Cook County, Illinois	233,600	1.33%
3	Harris County, Texas	682,081	1.08%	Harris County, Texas	177,438	1.00%
4	San Diego County, California	430,426	0.91%	Maricopa County, Arizona	160,158	0.93%
5	Orange County, California	423,387	0.90%	San Diego County, California	157,641	0.89%
6	Dallas County, Texas	402,337	0.85%	Dallas County, Texas	152,633	0.86%
7	Kings County, New York	399,066	0.84%	Orange County, California	139,778	0.79%
8	Queens County, New York	364,363	0.77%	Kings County, New York	126,422	0.72%
9	Maricopa County, Arizona	341,875	0.72%	New York County, New York	121,879	0.69%
10	New York County, New York	336,334	0.71%	San Bernardino County, California	109,095	0.62%

Table 4. Top 10 Destination Mover Counts, 2000 Census and 2005-2009 ACS

	2000 Census			2005-2009 ACS		
	County, State	Mover Count	Percent	County, State	Mover Count	Percent
1	Los Angeles County, California	655,948	1.39%	Los Angeles County, California	212,882	1.20%
2	Maricopa County, Arizona	558,779	1.18%	Maricopa County, Arizona	193,227	1.09%
3	San Diego County, California	424,318	0.90%	Harris County, Texas	176,805	1.00%
4	Harris County, Texas	372,189	0.79%	Cook County, Illinois	142,089	0.80%
5	Cook County, Illinois	371,651	0.79%	San Diego County, California	141,805	0.80%
6	Orange County, California	363,705	0.77%	Riverside County, California	131,463	0.74%
7	Clark County, Nevada	363,831	0.78%	Dallas County, Texas	126,286	0.68%
8	Dallas County, Texas	312,593	0.66%	San Bernardino County, California	118,090	0.67%
9	Riverside County, California	309,017	0.65%	Orange County, California	115,174	0.65%
10	San Bernardino County, California	301,055	0.64%	King County, Washington	104,353	0.59%

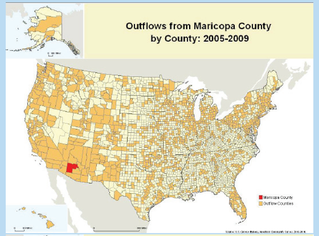
Old flows, not found in 2005-2009 ACS top ten.
New flows, not found in 2000 Census top ten.

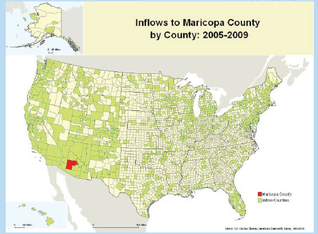
Source: U.S. Census Bureau, 2000 Census and 2005-2009 American Community Survey

Maricopa County, AZ: Most Diversie Origin and Destination

ORIGIN

- Maricopa County, Arizona as an origin sent movers to 1,156 counties, making it the county with the largest number of county flow pairs out. Movers from Maricopa County, Arizona were the least concentrated geographically.





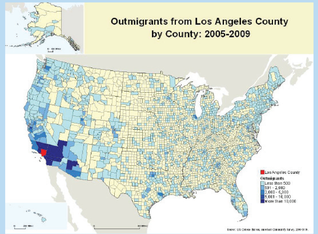
DESTINATION

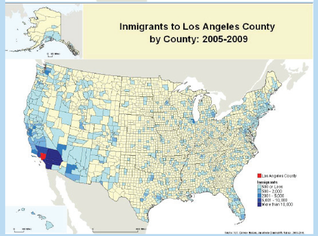
- Maricopa County, Arizona as a destination received movers from 993 counties, making it the county with the largest number of county flow pairs in. Movers into Maricopa County, Arizona came from a set of more diverse counties than any other destination county.

Los Angeles County, CA: Largest Numbers Entering and Leaving

ORIGIN

- 372,331 county-to-county movers left Los Angeles County, California, the largest origin county by persons. Movers leaving Los Angeles County, California made up 2.1% of the total movers.



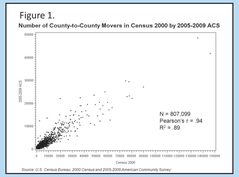


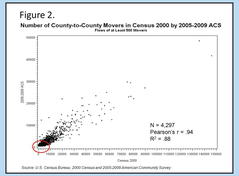
DESTINATION

- 212,882 county-to-county movers entered Los Angeles County, California, the largest destination county by persons. Movers entering Los Angeles County, California made up 1.2% of the total movers.

How do mover characteristics in the 5-year ACS estimates compare to the 2000 Census?

- The full flows sample between the two surveys are highly correlated and predictive of one another.
- Despite the change in the question and the decline in mobility, the relative magnitude of flows has not changed.

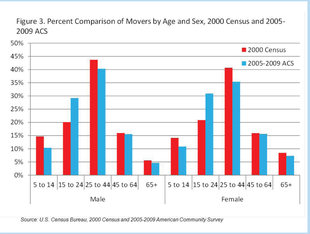




- As you can see, there is not much difference between Figures 1 and 2. The red circle in the lower left hand corner of Figure 2 indicates where 800,000 flows were removed from the analysis, leaving only flows with 500 or movers. Correlations were run on both samples and had similar results.
- These figures help to show that even when dealing with a small fraction of the total flows, much of the migration picture remains the same.

By characteristics:

- Given that the data from the 2000 Census and estimates from the ACS correlate and model one another well, characteristics were analyzed.



- The share of movers has decreased in all age categories since the 2000 Census except for ages 15 to 24. Males in this age group made up 20.1% of the movers in 2000, and jumped to 29.2% in 2005-2009. Females accounted for 20.9% of the movers aged 15 to 24 in 2000, and were over 30% of the share in 2005-2009.
- Marked decreases in mover shares were found between the ages of 5 to 14 and 25 to 44, though decreases were found in the remaining age categories as well.

Findings

- Maricopa County, Arizona was the largest origin and destination flow county, according to the 2005-2009 ACS.
- Los Angeles County, California was the largest origin and destination county by number of movers, according to the 2005-2009 ACS.
- The county-to-county migration estimates from the 2005-2009 ACS reflect the patterns found in the 2000 Census and are considered reliable. Despite the continuity in these data, the ACS estimates also show geographic and characteristic changes in mobility since 2000.
- The share of movers has declined in each age category since the 2000 Census, especially for age groups 5 to 14 and 25 to 44 and for both males and females alike.
- The share of movers increased between the ages of 15 and 24 between the 2000 Census and the 2005-2009 ACS. This is true for both males and females.
- Routine collection of ACS 5-year data will allow for annual production of updated estimates, crossed by various characteristics.
- The 2005-2009 5-year ACS county-to-county migration estimates are the first county-to-county estimates to be released since the 2000 Census.
- Despite the change in question, ACS 5-year estimates closely map those from the 2000 Census.

The views expressed on statistical, methodological, technical, or operations issues are those of the author and not necessarily those of the U.S. Census Bureau.

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